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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,405	01/23/2004	John Chen	1001.1677101	9509
28/075 7590 03/27/2008 CROMPTON, SEAGER & TUFTE, LLC 1221 NICOLLET AVENUE SUITE 800 MINNEAPOLIS, MN 55403-2420				
EXAMINER				
HALL, DEANNA K				
ART UNIT		PAPER NUMBER		
3767				
MAIL DATE		DELIVERY MODE		
03/27/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/764,405

**Applicant(s)**

CHEN ET AL.

**Examiner**

DEANNA K. HALL

**Art Unit**

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Acknowledgments*

1. This office action is in response to the after final response filed on March 7, 2008.
2. Examiner wishes to re-open prosecution with the following second non-final action.
3. Examiner agrees with applicant's remarks pertaining to the oath; thereby the previous objection to the oath is withdrawn with no new oath or declaration being necessary.
4. The information disclosure statement (IDS) noted in applicant's remarks was reconsidered and returned to applicant in the last office action dated January 9, 2008.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saab (US 5,499,973) in view of Mugge et al. (US 5,478,620) ("Mugge").** Saab discloses:

A first tubular member 12 having a proximal portion and a distal portion with a lumen 18 extending between the proximal portion and the distal portion; a balloon 16 having a proximal and distal waist length C4 L50-55 and an expandable region therebetween 20; and a polymeric tie layer 30, 32, 34.

Saab does not directly show that the tie layer comprises a polyester polymer and a polyamide polymer. Mugge teaches at least one intermediate layer made of a mixture of polyester and a polyamide to force-lockingly connect together the inner and outer layer of a polyamide pipe C1 L47-53. The tie layer of Mugge further comprises a copolymer of polyester and polyamide, see Claim 1. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the tie layer of Saab with the polyester and polyamide tie layer as taught by Mugge for connecting together the tubular members.

With reference to claims 4 and 5, the tubular members of Mugge are formed from a polyamide C1 L10-11 with the polyamide gaining more impact resistance by forming the tubular member from a polyether block amide C2 L17-32. Also, in accordance with claim 9, the intermediate (tie) layer of Mugge comprises a polybutylene terephthalate C4 L41-63.

With reference to claim 7, Saab further discloses two layers or a heat-shrunk sleeve directly over the first tubular member C6 L13-49.

**7. Claims 2-3, 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saab in view of Mugge further in view of Lee (US 6,217,547).**

The combination of Saab/Mugge discloses the invention as substantially claimed (see above). However, this combination does not directly disclose the materials used in constructing the balloon. Lee teaches that the balloon can be formed of PET or copolyester C3 L67-C4 L2. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified the device of Saab/Mugge with the balloon of Lee for having a balloon made of materials that would be connectable to the tubular member.

### ***Response to Arguments***

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEANNA K. HALL whose telephone number is (571)272-2819. The examiner can normally be reached on M-F 9:00am-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Simons can be reached on 571-272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deanna K. Hall/

Examiner, Art Unit 3767

/Kevin C. Simmons/

Supervisory Patent Examiner, Art Unit 3767